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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/032,863	03/02/1998	GORDON F. GRIGOR	0100.01117	1397

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VEDDER PRICE KAUFMAN & KAMMHOLZ  
222 N. LASALLE STREET  
CHICAGO, IL 60601

EXAMINER

NGUYEN, KEVIN M

ART UNIT PAPER NUMBER

2629

DATE MAILED: 10/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/032,863

Applicant(s)

GRIGOR ET AL.

Examiner

Kevin M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 24,29-33,38-53 and 56-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24,29-33,38-53 and 56-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Request for Continued Examination***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13 April 2006 has been entered. An action on the RCE follows:
2. The status of claims 24, 29-33, 38-53 and 56-58 are currently pending in this application.
3. The indicated allowability of claims 24, 29-33 and 38-48 are withdrawn in view of the newly discovered reference(s) to Kou et al. and Chee. Rejections based on the newly cited reference(s) follow.
4. Claim 24 is objected to because of the following informalities: the item listed as (a), (b), (c), (d), (e), and (f) in claim 24 should begin with a new line with indentation for each line. Claim 24 is objected to because the lines are crowded too closely together, making reading difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).
5. Claim 33 is objected to because of the following informalities: at line 13 of page 4 of claim 33, "the display controller providing display data to the multiple display" should be read --the display controller providing the display data to the multiple display--

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6. Claim 24 is objected because of the word “the display controller simultaneously providing display data to the multiple display” in lines 16-17 of claim 24 (d), and rewriting of the claim 24 (d) in order to read in light of the specification as following below.

--the display controller providing a plurality of display images to the multiple display devices--

Appropriate correction is required.

7. Claim 33 is objected to under 37 CFR 1.75(a) because although these claims meet the requirement 112/2d, i.e., the metes and bounds are determinable, however, “operably couple the display controller to at [what] a plurality of screen memories” in line 14 of page 4 of claim 33.

It is in the best interest of the patent community that applicant, in his/her normal review and/or rewriting of the claims, to take into consideration these editorial situations and make changes as necessary.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 33-56 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which

was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Independent claims 33, 42 and 49 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for “the same image is to be identically displayed on display 18 and 20” see page 6, line 10-13, does not reasonably provide enablement for “simultaneously providing the display data [display two images] to at least one display [device]” in line 5 of page 6 of claim 42, and in line 7 of claim 49; and “simultaneously retrieving the display data from the at least one of the plurality of screen memories,” in lines 16-17 of page 4 of claim 33. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

This limitation contains various inconsistencies and/or ambiguities so that a display screen of a single display device is unable to simultaneously display two images. How are two display images simultaneously displayed on at least one display screen of a single display device ? Where is in the specification that supports the claimed limitation “simultaneously providing the display data [display two images] to at least one display [device]”?

Claims 38-41 are depended on claim 33; therefore, these claims are rejected for the reason set forth above.

Claims 43-48 are depended on claim 42; therefore, these claims are rejected for the reason set forth above.

Claims 50-56 are depended on claim 49; therefore, these claims are rejected for the reason set forth above.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 24 and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kou et al. (US 6,154,225) in view of Chee (US 5,694,141).

11. As to claim 24, Kou et al. (Kou) teaches a video graphics processing circuit [*a single-chip video-graphics controller 12, fig. 1*] comprises:

a processing unit [*a processor/CPU 40*];

memory [*an external display memory 16*];

a coupling controller [*a processor of a LCD processor 124, figs. 4 and 5*];

display preferences [*specific application of various sources such as a CRT 24, a LCD 20, and a TV 28*];

a computing system [*at least one picture/image is configured all times, fig. 7*];

configuration properties [*a virtual refresh<sup>TM</sup> architecture, the inconsistent refresh rates and types, see col. 3, lines 5-35*];

a plurality of display drivers [*three display drivers are inherently within the CRT 24, the LCD 20 and the TV 28*];

a plurality of screen memories [*an on-screen buffer 38 and an off-screen buffer 50*];

said single-chip video-graphics controller 12 *performs the programming instructions that executed by the CPU 40 to configure and reconfigure resolutions of the different display modes comprising the claimed features of claim 24 (a) (b) (c) (d) and (f), as further discloses in examples 1-4, see col. 7-11 for further details of the operation;*

Kou teaches all of the claimed limitation except for display controllers.

Figure 5 of Chee teaches a related video card 36 which includes a CRT controller 50 and a LCD controller 62 associated with a method of driving *that executed by a CPU 28, the CPU 28 performs the programming instructions to configure and reconfigure resolutions of the different display modes comprising the features of claim 24 (a) (b) (c) (d) and (f), as further discloses in col. 12-14.*

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the single-chip video-graphics controller 12 of Kou to become the single-chip video-graphics controller having the CRT controller 50 and LCD controller 62 as taught by Chee. The motivations for doing so would have been to apply to other system and devices to incorporate the display, while fabricate the device at low cost (see Chee, col. 19, lines 14-21; col. 19, lines 27-32 for details).

12. As to claim 29, as noting in *col. 17, lines 65 to col. 18, lines 10*, Chee further discloses the claimed features of these claims.

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13. As to claims 31 and 32, as noting in *col. 7, lines 28-38*, Kou further discloses the claimed features of these claims.

14. As to claim 30, figure 1 of Kou teaches a single-chip video-graphics controller 12, which includes a third display, e.g., the TV 28.

### ***Claim Rejections - 35 USC § 102***

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

16. Claims 57 and 58 are rejected under 35 U.S.C. 102(e) as being anticipated by Kou et al (US 6,154,225) hereinafter Kou.

17. As to claim 57, Kou teaches a video graphics processing circuit [*a single-chip video-graphics controller 12, fig. 1*] comprises:

a processing unit [*a processor/CPU 40*];

memory [*an external display memory 16*];

a coupling controller [*a processor of a LCD processor 124, figs. 4 and 5*];

display preferences [*specific application of various sources such as a CRT 24, a LCD 20 and a TV 28*];



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a computing system *[at least one picture/image is configured all times, fig. 7];*  
configuration properties *[a virtual refresh<sup>TM</sup> architecture, the inconsistent refresh rates and types, see col. 3, lines 5-35];*  
said single-chip video-graphics controller 12 *performs the programming instructions that executed by the CPU 40 to configure and reconfigure resolutions of the different display modes comprising the claimed features of claim 57, as further discloses in examples 1-4, see col. 7-11 for further details of the operation;*


18. The limitation of claim 58 are similar to those of claim 57, though in method form, therefore the rejection of claim 58, will be treated using the same rationale as claim 57.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN M. NGUYEN whose telephone number is 571-272-7697. The examiner can normally be reached on MON-THU from 8:00-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, a supervisor RICHARD A. HJERPE can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the Patent Application Information Retrieval system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Kevin M. Nguyen  
Patent Examiner  
Art Unit 2629

KMN  
September 27, 2006